

TRADE NAME

Ampro Model 731

MANUFACTURER

Ampro Corp., 2835 N. Western Ave., Chicago 18, Ill.

TYPE SET

AC Operated Magnetic Tape Recorder And Playback Unit.

TUBES (Four)

Types l2AX7 Bias Osc. - Pre Amp., 6AU6 Amp., 6AUQ5 Audio Output, 6X4 Rectifier.

POWER SUPPLY

110-120 Volts AC

RATING

.31 Amp@ 117 Volts AC

FOR SERVICE INFORMATION ON MECHANICAL UNIT SEE MODEL 730 - PHOTOFACT SET #133 - FOLDER #4.

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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PARTS LIST AND DESCRIPTIONS TUBES (SYLVANIA or Equivalent)

AMPR	0
MODEL	73

CHASSIS—TOP VIEW

		REPLACE	MENT DATA	RMA	
No.	USE	AMPRO PART No.	STANDARD REPLACEMENT	BASE TYPE	INSTALLATION NOTES
V1	Bias Osc-Pre Amp	18497-S	12AX7	9A	
V2	AF Amplifier	18699	6AU6	7BK	
V3	Audio Output	18701	6AQ5	7BZ	
V4	Rectifier	18700	6X4	5BS	

CAPACITORS

Capacity values given in the rating column are in mfd. for Electrolytic and Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

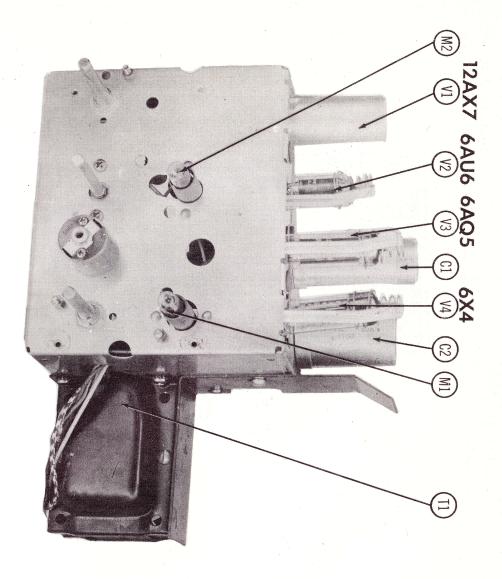
					REPLACEMEN	T DATA			IDENTIFICATION CODES
No.	CAP.	VOLT	AMPRO PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL- DUBILIER PART No.	ERIE PART No.	SPRAGUE PART No.	INSTALLATION NOTES
ClA	10	350	18715	AFH3-108	1	UP3035		TVL-1720	▲ Filter
В	30	350		BR1235A	1	-BR1235A		LTVA-1604	■ Filter
C2B	4	350	18716	AFH4-63		UPT1145CC	†	TVL-4662	■ Decoupling
В	4	350							■ Decoupling
C	25	15							A AF Amp. Cathode
D	25	15							Audio Output Cathode
C3	500	12	18489	SI500	D6-501	TM5T5	GP2K-501	5GA-T5	Tone Comp.
C4	.03	400	18732	P488- 03		PTE6S3		6TM-S3	AF Amp. Screen Bypass
C5	10000		18487	BPD-01	DD-103	TM5S1	821-01	5HK-S1	Audio Coupling
C6	5000		18488	BPD-005	DD-502	TM5D5	811-005	5HK-D5	Indicator Coupling
C7	10000		18485	BPD-001	DD-102	TM5Dl	801-001	5HK-Dl	Indicator Filter
C8	.03	400	18492	P488-03		PTE6S3		6TM-S3	Audio Coupling
C9	300	500	18733	1468-0003	D6-301	5W5T3	GP2K-301	MS-33	Tone Comp.
C10	. 001	600	18091	P688-001	D6-102	PTE6D1	GP2L-102	6TM-Dl	Tone Comp.
Cll	.007	200	18739	P488-0068	D6-682	PTE6D68	GP2-333-682	6TM-D68	Audio Coupling
C12	. 01	400	17782	P488-01	D6-103	PTE4S1	GP2-333-103	4TM-Sl	Tone Comp.
C13	10000	1.0	18487	BPD-01	DD-103	TM5S1	821-01	5HK-Sl	Audio Coupling
C14	1000		18485	BPD-001	DD-102	TM5Dl	801-001	5HK-Dl	RF Bypass
C15	.03	400	18732	P488-03		PTE6S3		6TM-S3	Bias Osc. Cathode
C16	500	-	18489	SI500	D6-501	TM5T5	GP2K-501	5GA-T5	Bias Osc. Grid Cap.
C17	.02	400	18731	P488-02	DF-203	PTE4S2		4TM-S2	Fixed Trimmer
C18	2700		18733	SI2700	D6-272	1R5D3	GP2-333-272		Fixed Trimmer
C19	500		18489	SI500	D6-501	TM5T5	GP2K-501	5GA-T5	Bias Osc. Coupling

CONTROLS

	RATI	10	RE	PLACEMENT DA	ATA				
No.	RESIST- ANCE	WATTS	AMPRO PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART NO.	INSTALLATION NOTES		
RIA B C R2A B	500KΩ Shaft Switch 50KΩ Shaft	1/2	18709 Not Req. Not Req. 18777 Not Req.	Q13-133 Not Req. 76-1 Q11-123 Not Req.	Ag-60-Z FS-3 SWB AG-44-S FS-3	B-59-S Not Req. Not Req. B-31 Not Req.	Volume Control Attach to RIA per instructions Attach to RIA per instructions Tone Control Attach to R2A per instructions		

RESISTORS

			REPLACE	MENT DATA	
ITEM No.	RATIN		AMPRO	IRC PART No.	IDENTIFICATION CODES
	RESISTANCE	WATTS	PART No.	TAKI NO.	
R3	470ΚΩ	1 2 1 2	18474	BTS-470K	Bias Osc. Grid
R4	220KΩ	1/2	17959	BTS-220K	Bias Osc Plate
R5	10Meg	1/2	17554	BTS-10 Meg	Pre Amp. Grid
R6	220KΩ	1/2	17959	BTS-220K	Pre Amp. Plate
R7	560KΩ		18467	BTS-560K	AF Amp. Plate
R8	2700Ω	1 2 1 2	18582	BTS-2700	AF Amp. Cathode
R9	1.8 Meg	1/2	18436	BTS-1.8 Meg	AF Amp. Screen
R10	390KΩ	1212	18729	BTS-390K	Output Grid
RII	100KΩ	1/2	18471	BTS-100K	Output Grid
R12	270Ω	1	18770	BTA-270	Output Cathode
R13	22KΩ	1/2	18583	BTS-22K	Decoupling
R14	220KΩ	1/2	17959	BTS-220K	Tone Compensation
R15	100KΩ	1/2	18471	BTS 100K	Indicator Network
R16	220ΚΩ	- 2- 2- 2- 2- 2	17959	BTS-220K	Indicator Network
R17	470ΚΩ	1/2	18474	BTS- 470K	Indicator Newrok
R18	390KΩ	1/2	18729	BTS- 390K	Voltage Divider
R19	2700Ω	1	18653	BTA-2700	Filter
R20	390Ω	2	18772	BTB-390	Filter
R21	33Ω	1	18771		Voice Coil Shunt
R22	3Ω	5	18718	1 3/4 A-3	Transformer Shunt - Wire Wound



(R9)(C13)

R8

R6

R4

(C17)

(C12)

(C11)

R2

C14)

(R21)

PARTS LIST AND DESCRIPTIONS (Continued)

CHASSIS—BOTTOM VIEW

TRANSFORMER (POWER)

				2	NAINSI ONNEN (I OVEN)	- CONER		
						REPLACEM	REPLACEMENT DATA	
N N		RAT	SATING		AMPRO	STANCOR	MERIT	CHICAGO
	PRI.	SEC. 1	SEC. 2	SEC. 3	PART No.	PAKI NO.	PAKI NO.	PAKI No.
II	117VAC		480VCT 6.3VAC		18728	PC-8419	P-3147	DV-60
	@.31A	.050ADC	@1.7A					

į	PR.	SEC.	1 S	EC. 2	SEC. 1 SEC. 2 SEC. 3	PART No.	PART No.	No.	PARI No.	PART No.
II.	117VAC 480VCT 6.3VAC (2).31A .050ADC	480V .050A	CT 6	3VAC		18728	PC-8419	Ф.	P-3147	PV-60
				-	DANG	TRANSFORMER (ALIDIO OLITPLIT)		(TIMIT)		
	_					REPLACEM	REPLACEMENT DATA			
ITEM	_	Ş	KAIING			-		0	ALICTALLA	SETOIN INCITATION
Ž	乚	IMPEDANCE	DC RES.	RES.	AMPRO			CHICAGO	INSIALLA	NION NOIES
	L	SEC.	PRI.	SEC.	PART No.	o. PAKI No.	PAKI NO.	PAKI NO.		
L L		3 40	5200	5KO 3 40 5200 70	18789		A_30100	@0 0A	On one Hind (A-38777 A-30107 BO-0 7 Drill one now mounting hele
7		O. 130	25070			-	Terno-v	- a-OVI	Drill one ne	ew mounting noie.

SPEAKER

(R15)

C8)

R1

(C7)

	NOTES				
_	QUAM	PART No.	57A1		
 REPLACEMENT DATA	VIKING	PART No.	5719		
REPL	AMPRO	PART No.	18775		
	RATINGS	V. C. IMP.	3.40	V. C. DIA.	91/6
		FIELD RES.	P.M.	CONE DIA.	Spir 5"x7"
	N S	2	SPIA		SPIR

(C3)

C9

(M3)

R7

C4 C15 (C10)

NOTES

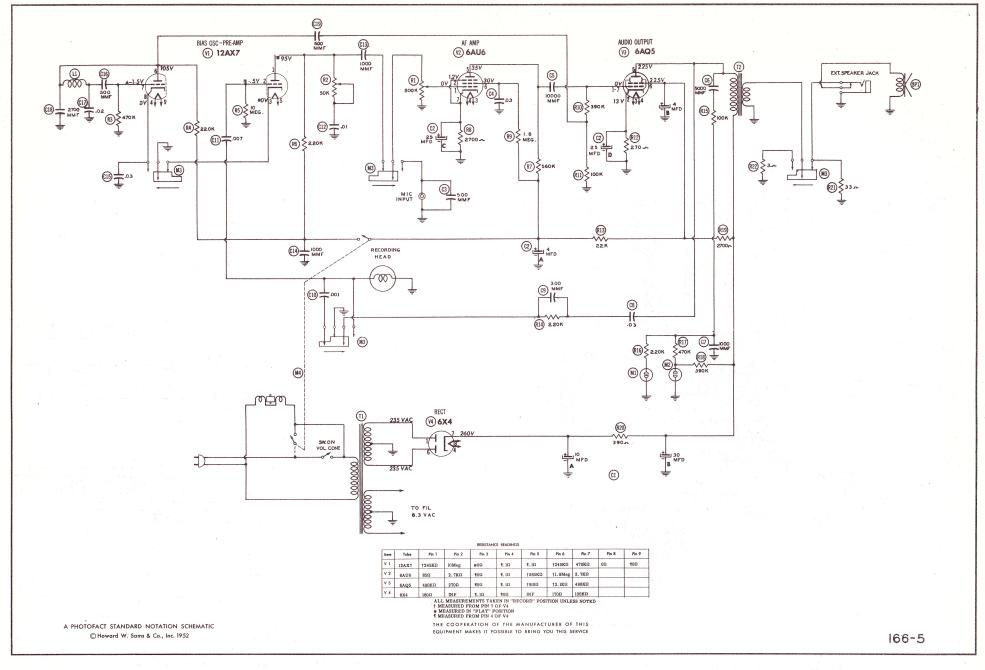
C6) R20(R14) C1) R19 R13(R12) C5(R10)(R11) C19(R5)

COILS (RF-IF)	REPLACEMENT DATA	MERIT			
S	REPLACEM	AMPRO	PART No.		18784
		DC RES.			
		DC B			10322
		NSE		Bias Osc.	Coil
		N EW		I	

MISCELL ANFOLIS

MISCELLANEOUS	M PART NAME AMPRO NOTES PART No.	16915-1	Neon Bulb 16915-1	Switch 17786	Switch 18696	Jack 18708 Phono- Mic	18769
	No.	MIN		-	M4 S	-	-

SET 166



1 - DC Voltage measurements are at 20,000 ohms per volt, AC Voltages measured at 1000 ohms per volt.

2 - Socket connections are shown as bottom views.

3 - Measured values are from socket pin to common negative.

4 - Line voltage maintained at 117 volts for voltage readings. 5 - Nominal tolerance on component values makes possible a

variation of - 15% in voltage and resistance readings.
6 - Proper output load connected.